



Pioneer Energy Services

Dual Induction Log

15-135-25,371-00-00

API No.

Company **L. D. Drilling, Inc.**
 Well **Stenzel Partnership #2-20**
 Field **L.T.P. North**
 County **Ness** State **Kansas**

Location **1650' FNL & 2290' FEL**

Sec: **20** Twp: **18 S** Rge: **24 W**

Other Services
 CNL/CDL
 MEL

Permanent Datum **Ground Level** Elevation **2293**
 Log Measured From **Kelly Bushing** **5** Ft. Above Perm. Datum
 Drilling Measured From **Kelly Bushing**

Elevation
 K.B. 2298
 D.F.
 G.L. 2293

Date	11/15/2012
Run Number	One
Depth Driller	4400
Depth Logger	4402
Bottom Logged Interval	4401
Top Log Interval	350
Casing Driller	8.625 @ 387
Casing Logger	385
Bit Size	7.875
Type Fluid in Hole	Chemical
Salinity, ppm CL	5000
Density / Viscosity	9.2 49
pH / Fluid Loss	9.5 10.0
Source of Sample	Flowline
Rm @ Meas. Temp	.45 @ 70
Rmf @ Meas. Temp	.34 @ 70
Rmc @ Meas. Temp	.61 @ 70
Source of Rmf / Rmc	Charts
Rm @ BHT	.26 @ 120
Operating Rig Time	4 Hours
Max Rec. Temp. F	120
Equipment Number	108
Location	Hays
Recorded By	D. Martin
Witnessed By	Kim Shoemaker

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All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages, or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees. These interpretations are also subject to our general terms and conditions set out in our current Price Schedule.

Comments

Thank you for using Pioneer Energy Services
 www.pioneerres.com
 785 625 3858
 Ness City, KS
 4 1/2 W to N Rd., 1 1/2 N,
 W Into

Database File: c:\warrior\data\ld_drilling_stenzel_partnership #2-20\ldhd.db
 Dataset Pathname: DIL\ldstk
 Presentation Format: dil2in
 Dataset Creation: Thu Nov 15 08:58:47 2012
 Charted by: Depth in Feet scaled 1:600

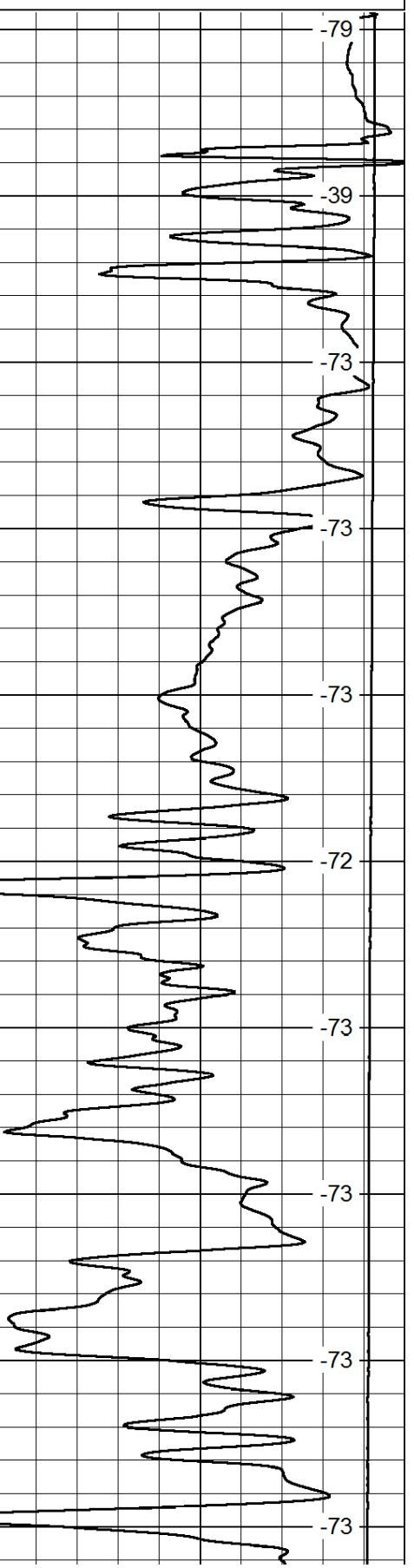
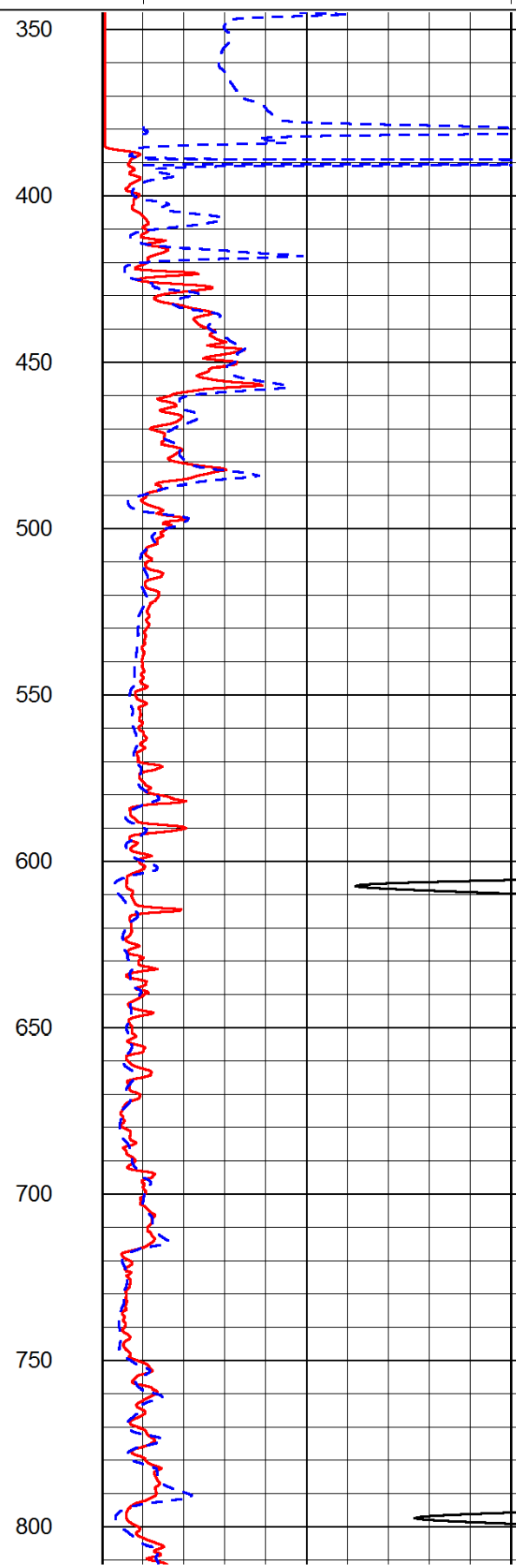
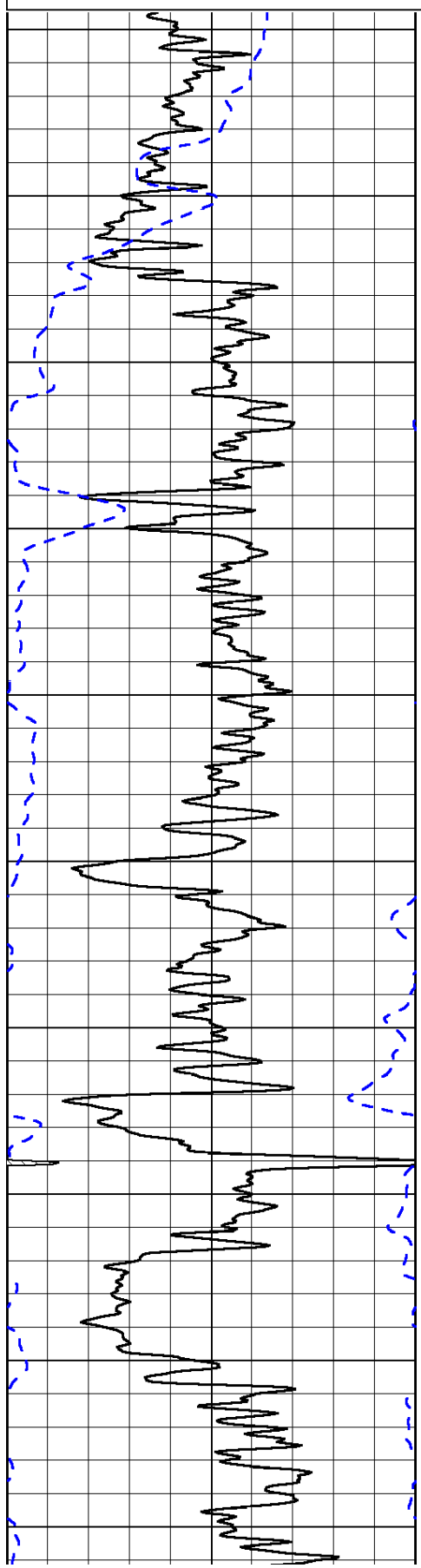
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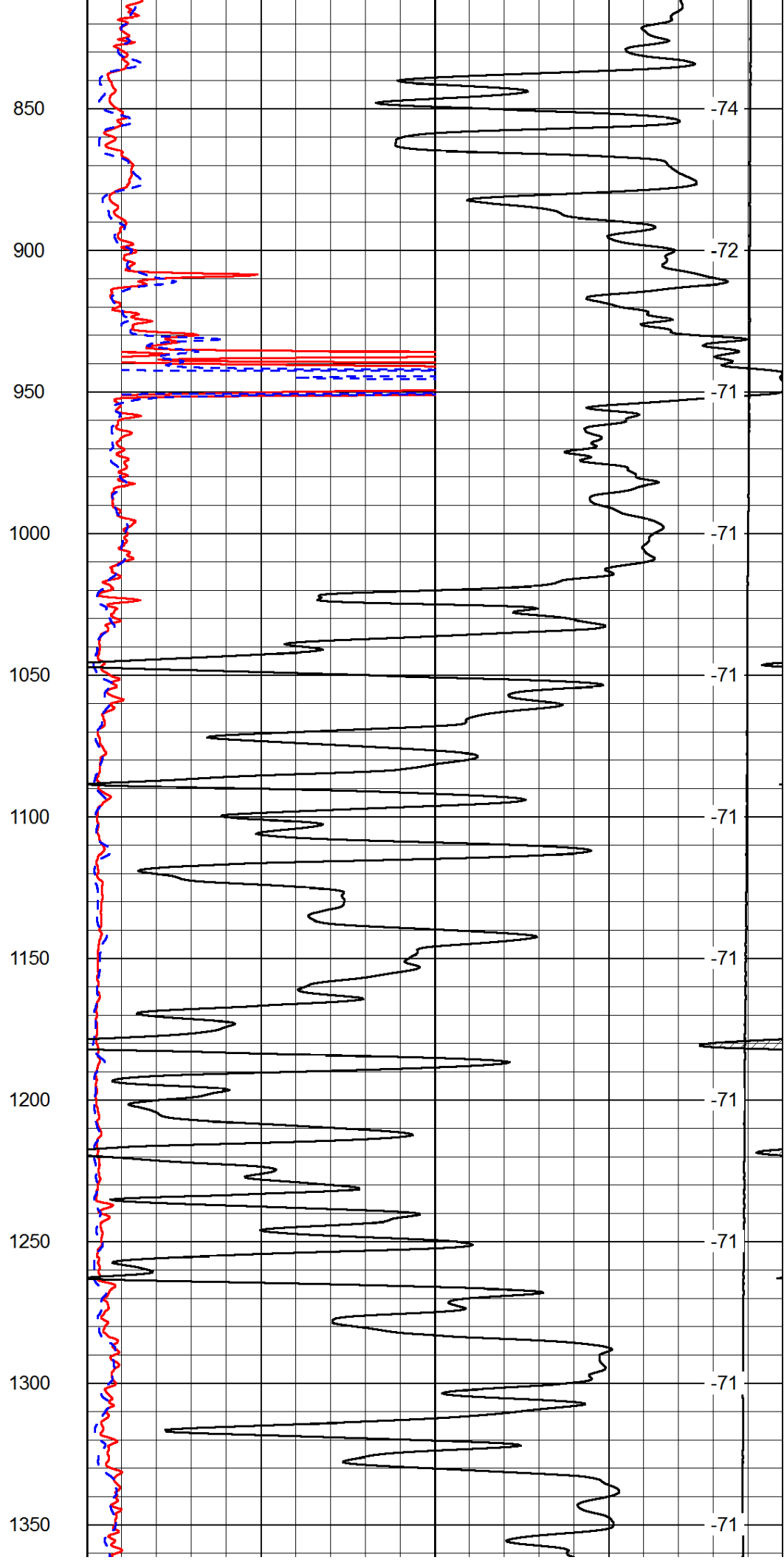
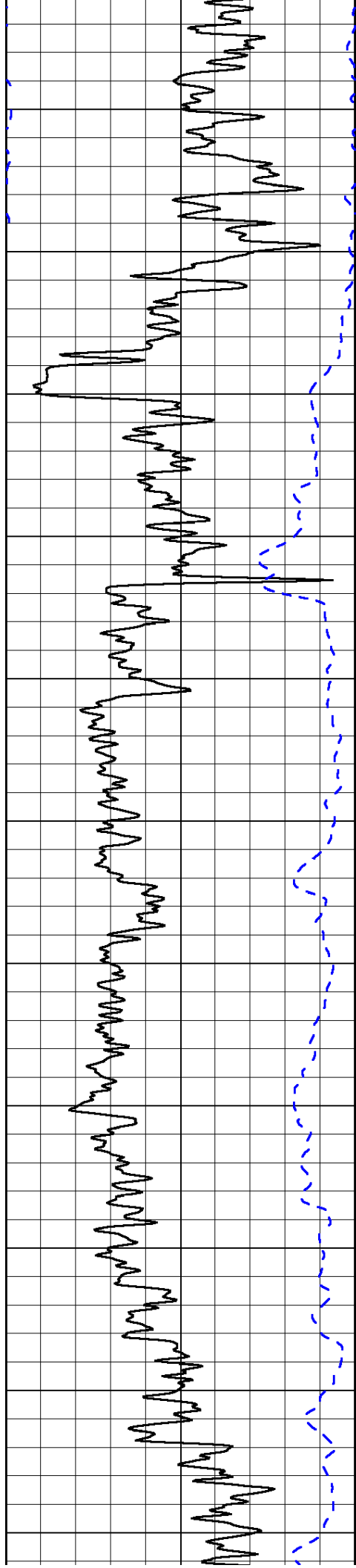
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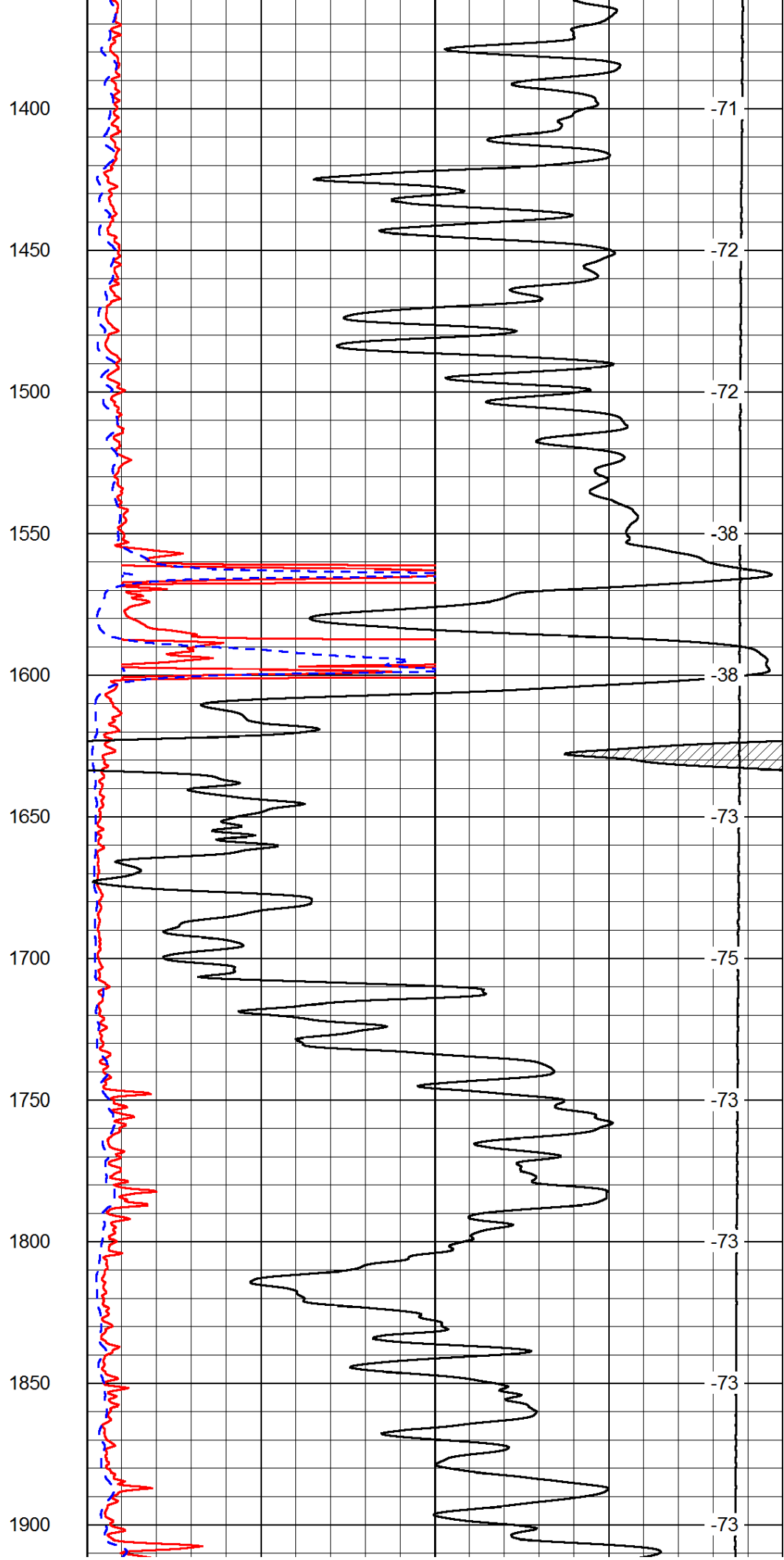
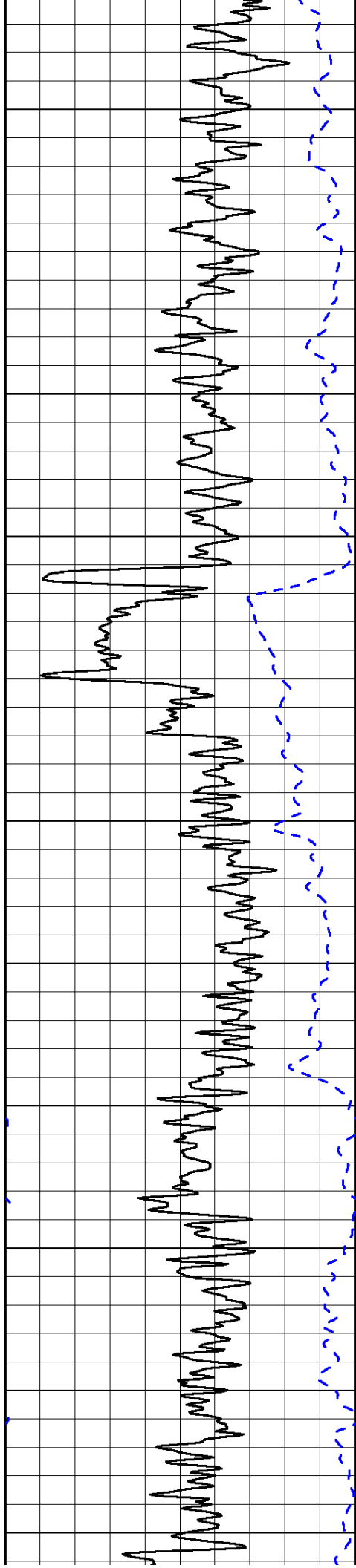
LSPD

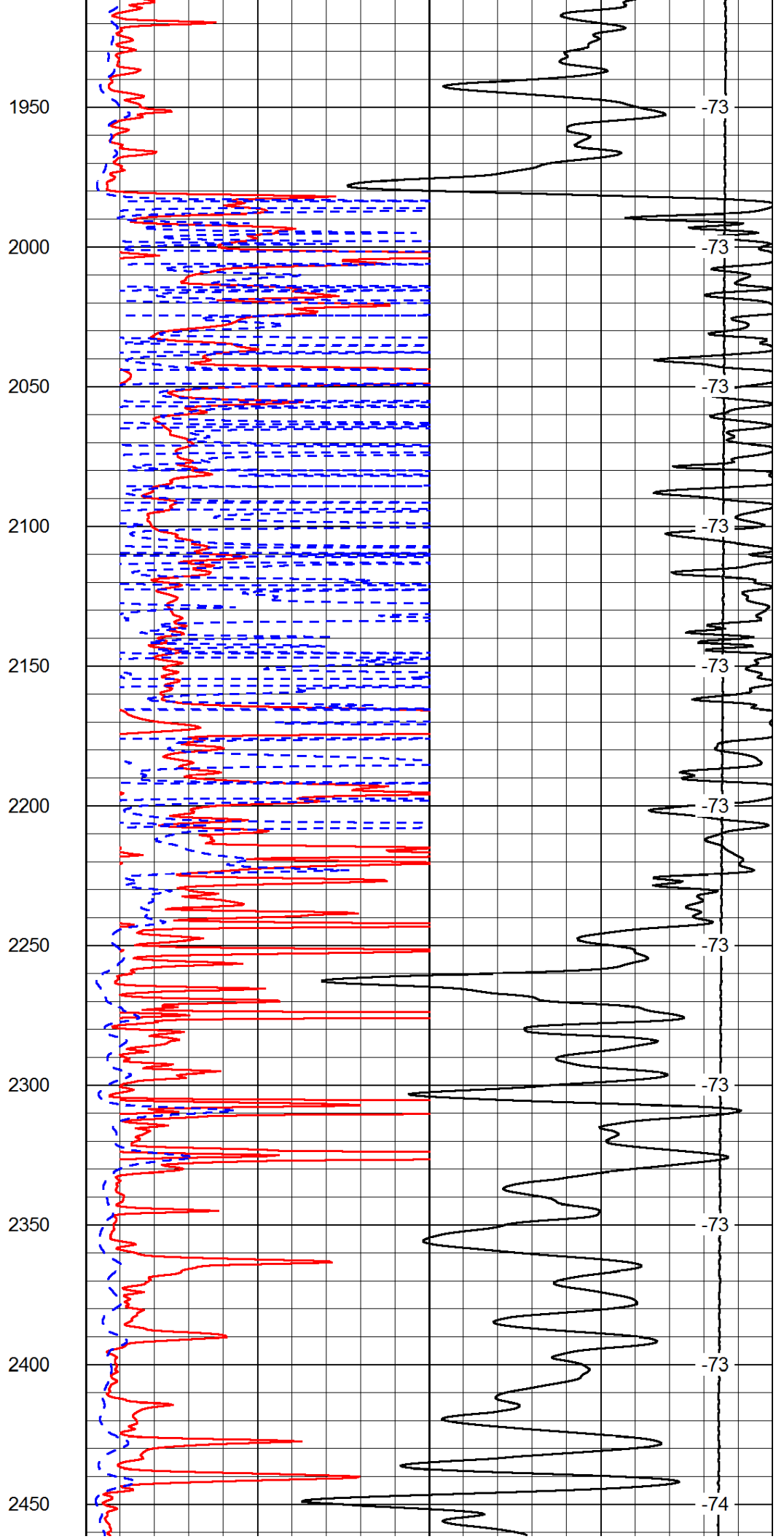
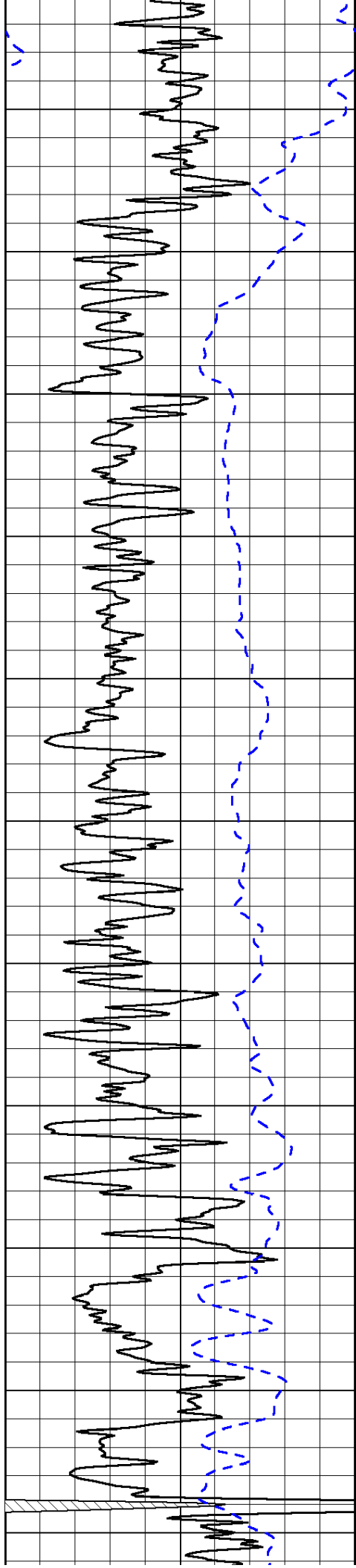
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15000	Line Tension	0

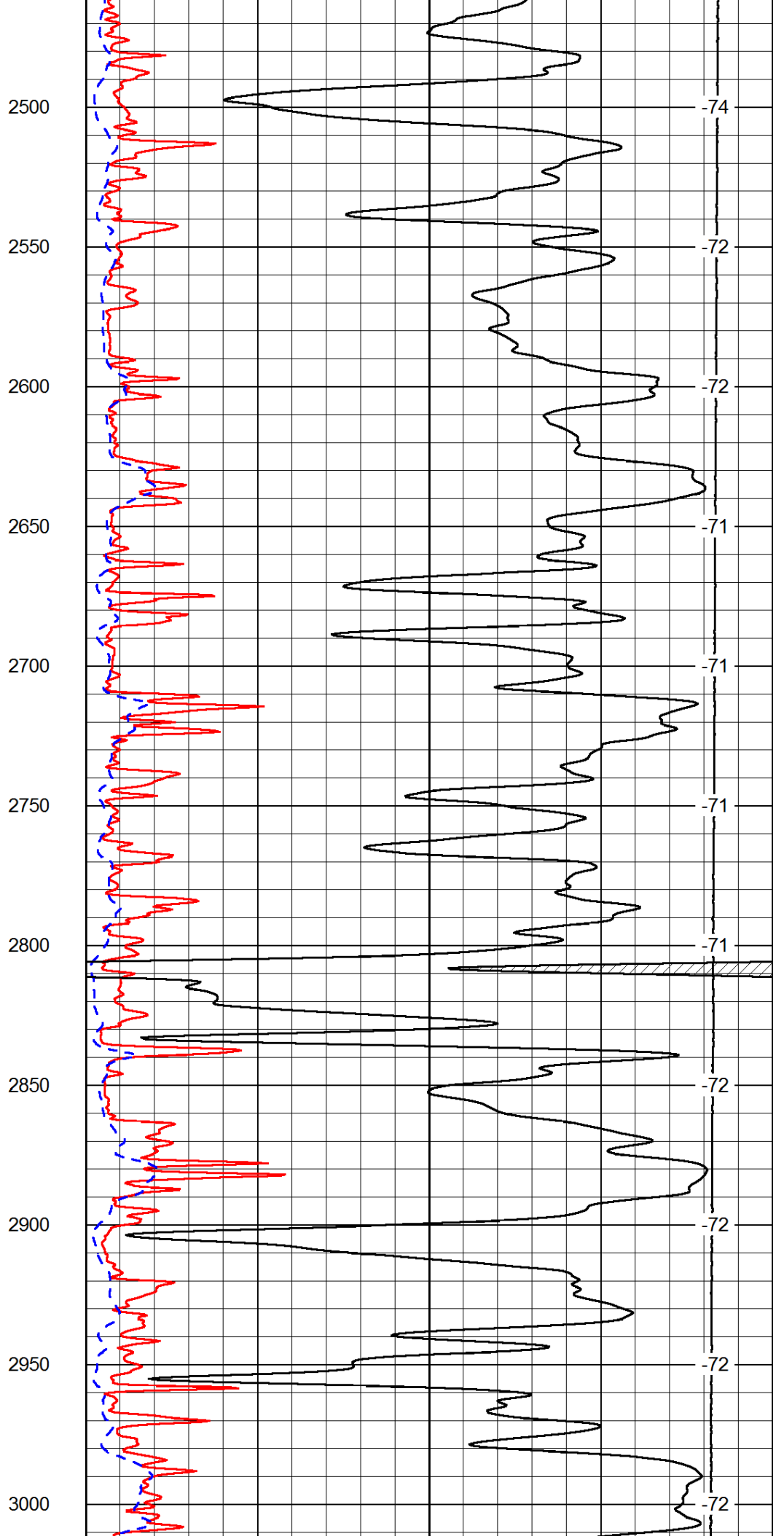
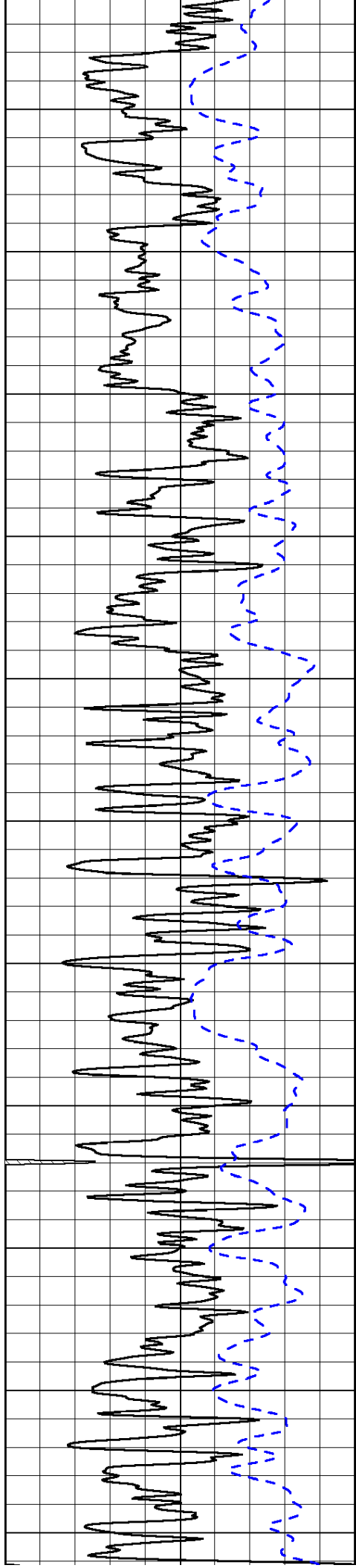
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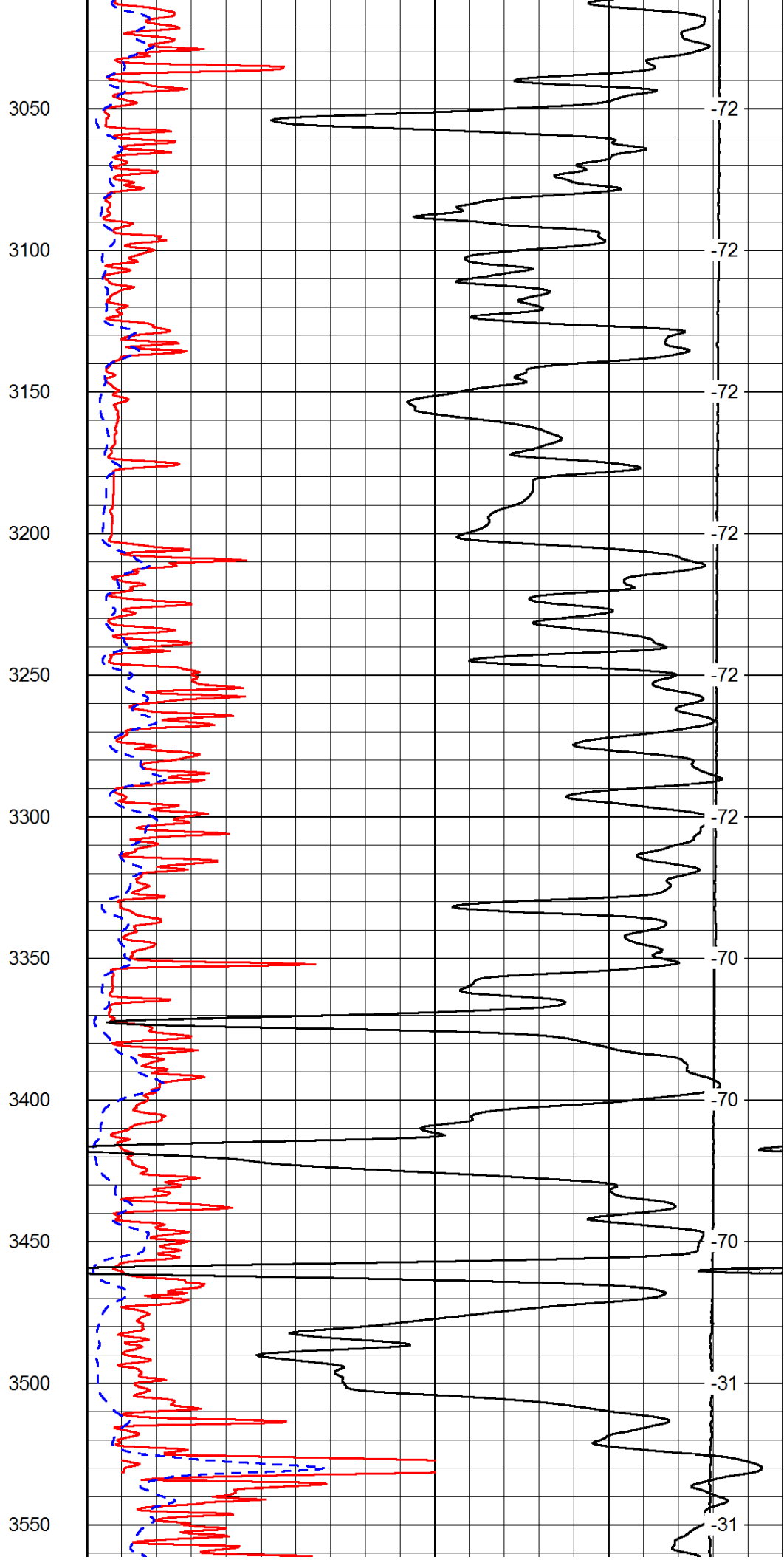
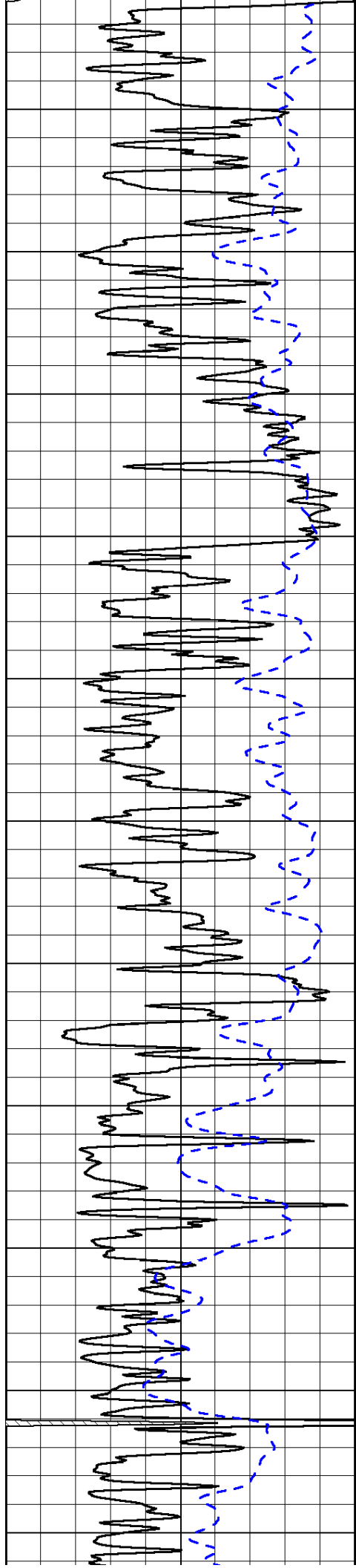


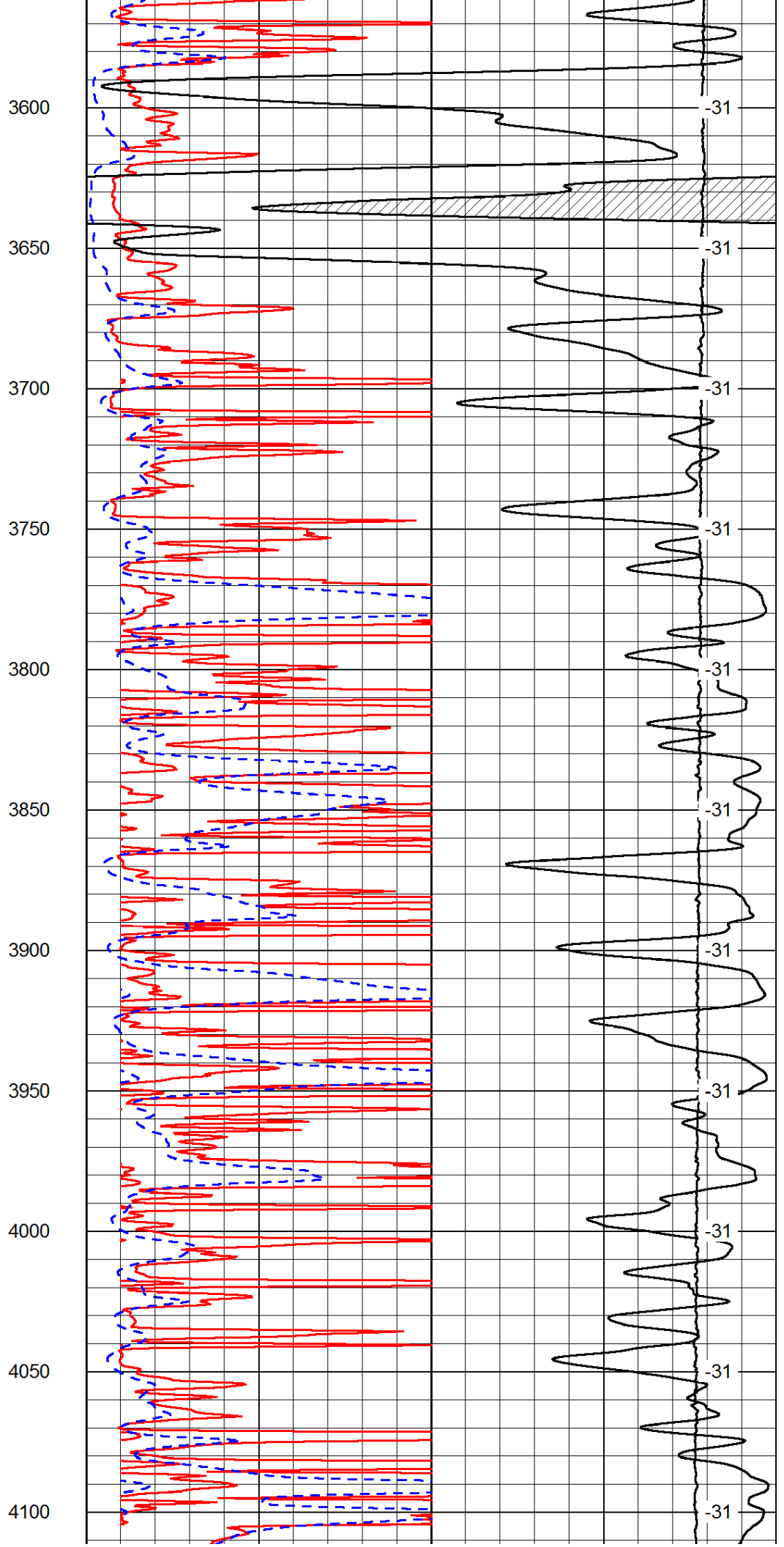
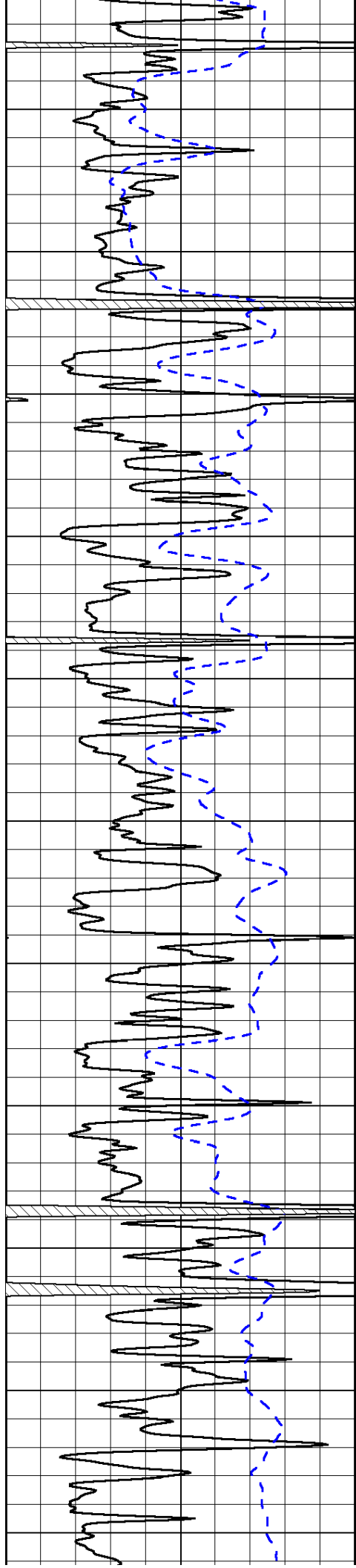


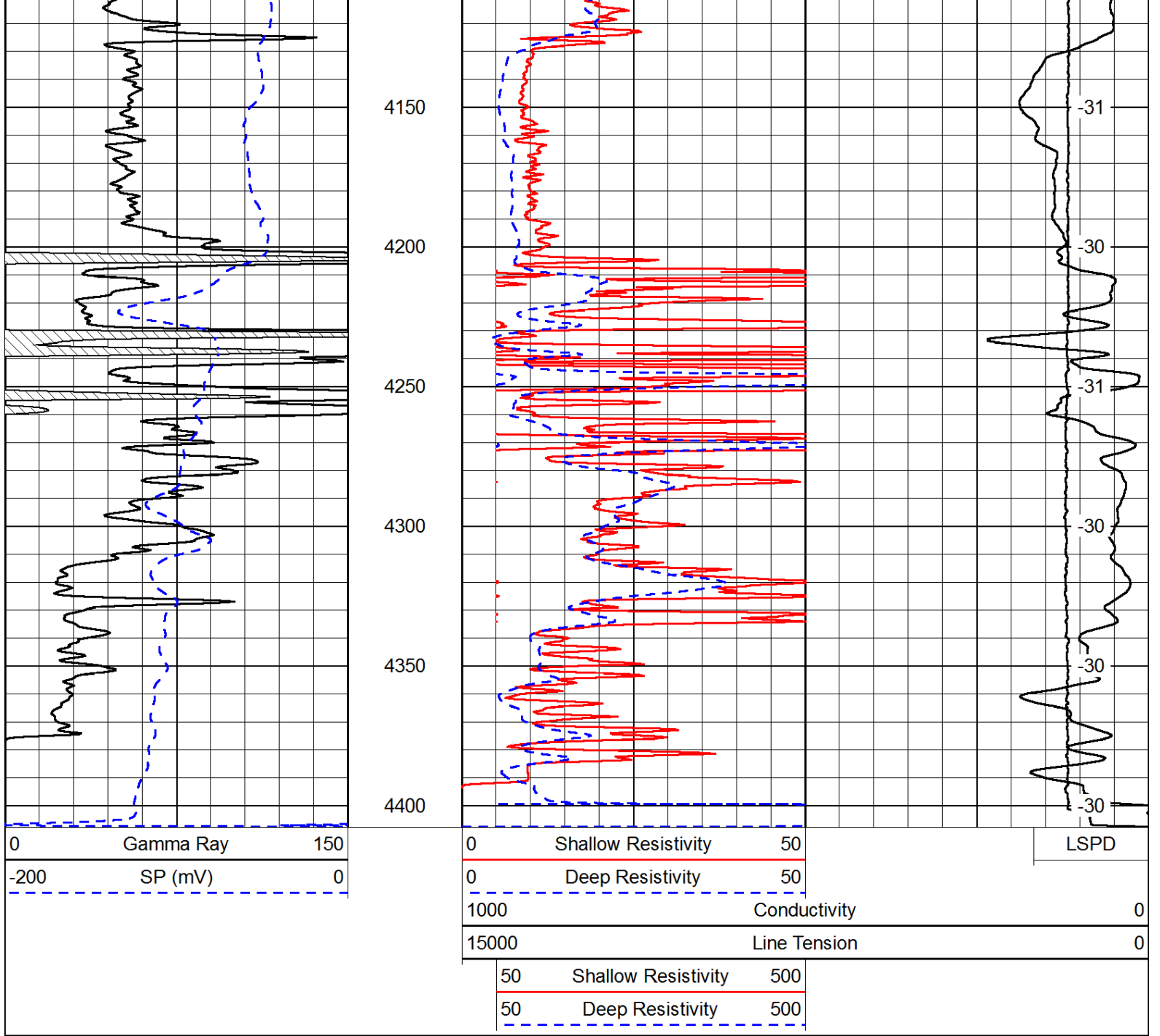




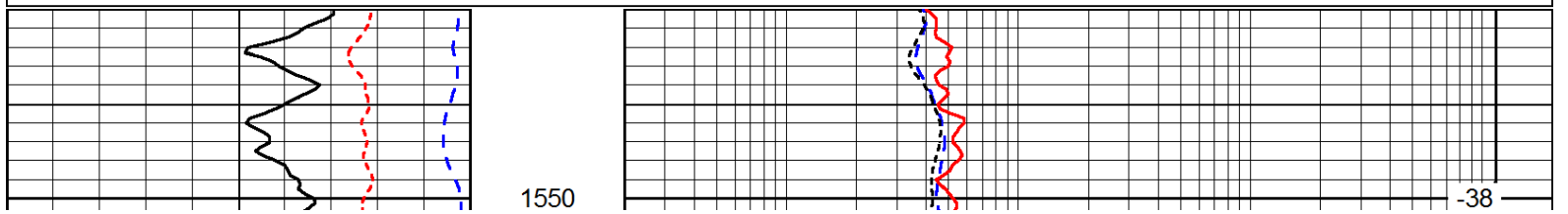
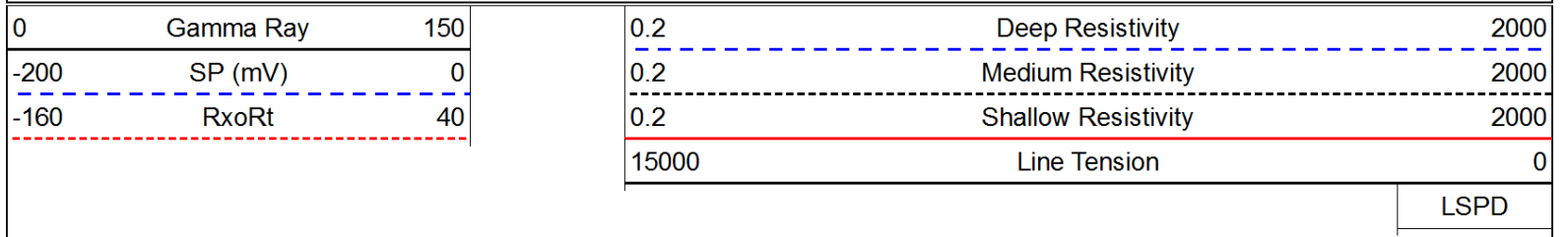


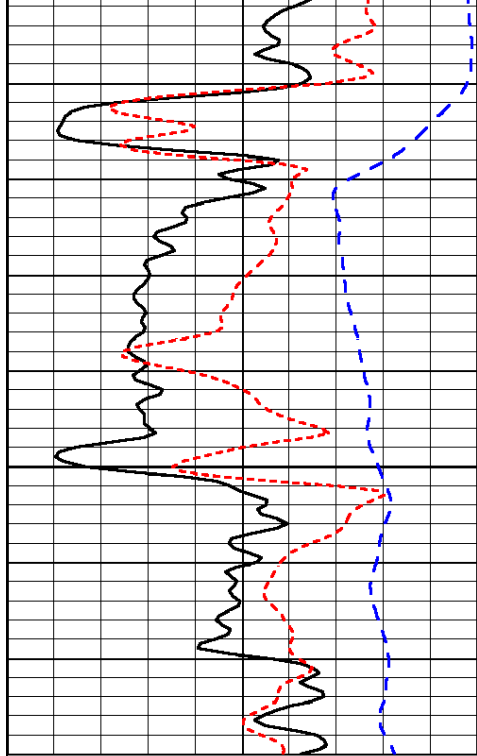






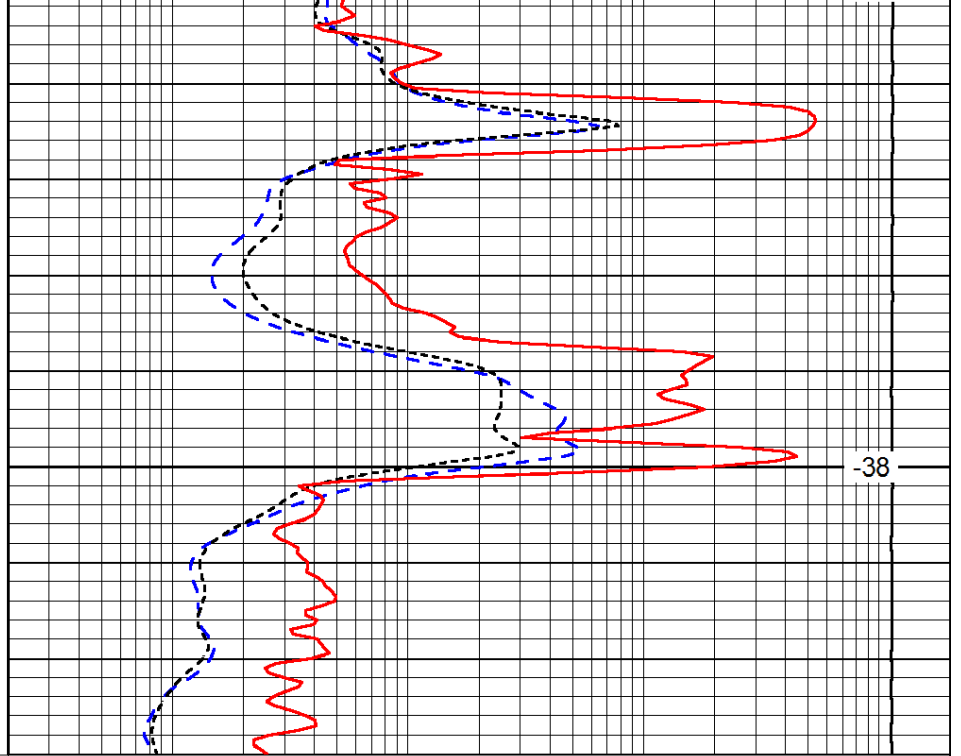
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 Presentation Format: dil
 Dataset Creation: Thu Nov 15 08:58:47 2012
 Charted by: Depth in Feet scaled 1:240





0	Gamma Ray	150
-200	SP (mV)	0
-160	RxoRt	40

1600



0.2	Deep Resistivity	2000
0.2	Medium Resistivity	2000
0.2	Shallow Resistivity	2000
15000	Line Tension	0

-38

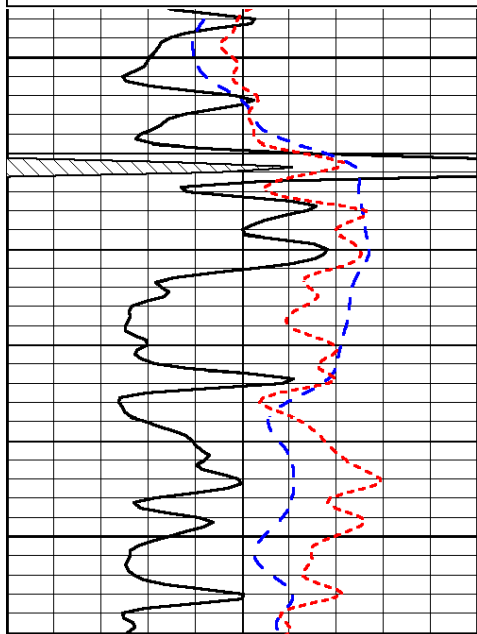
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-200	SP (mV)	0
-160	RxoRt	40

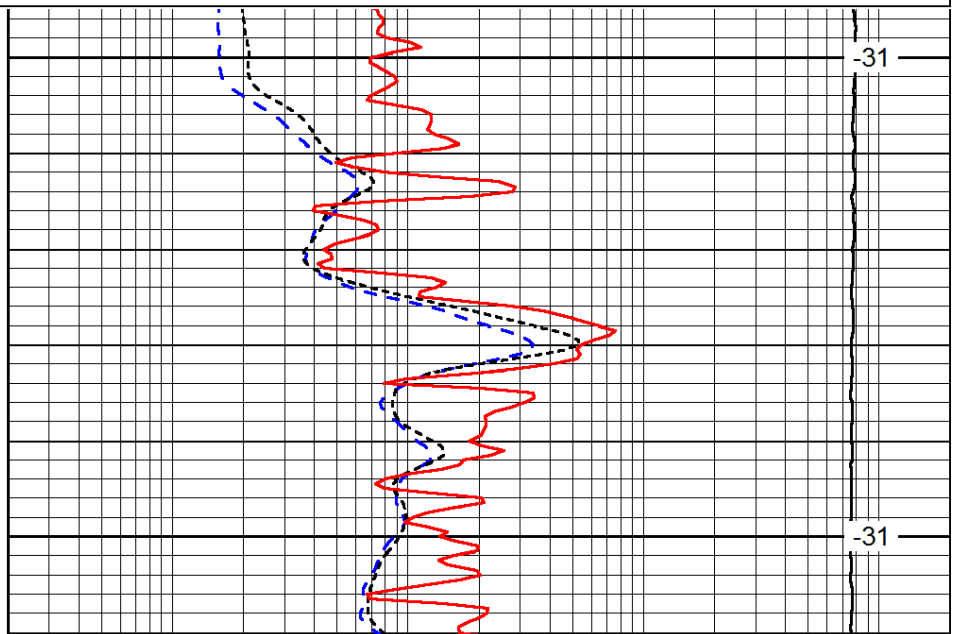
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0.2	Medium Resistivity	2000
0.2	Shallow Resistivity	2000
15000	Line Tension	0

LSPD



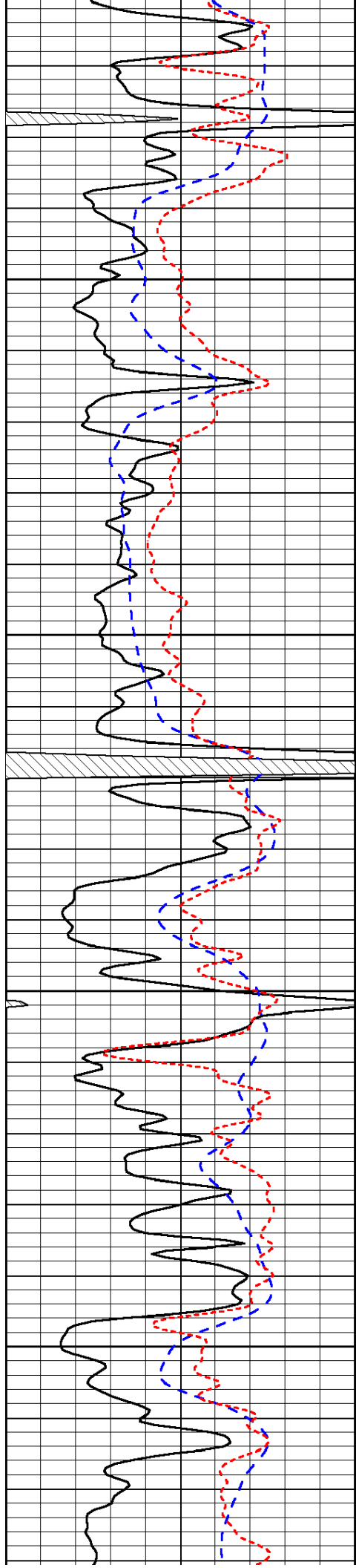
3500

3550



-31

-31

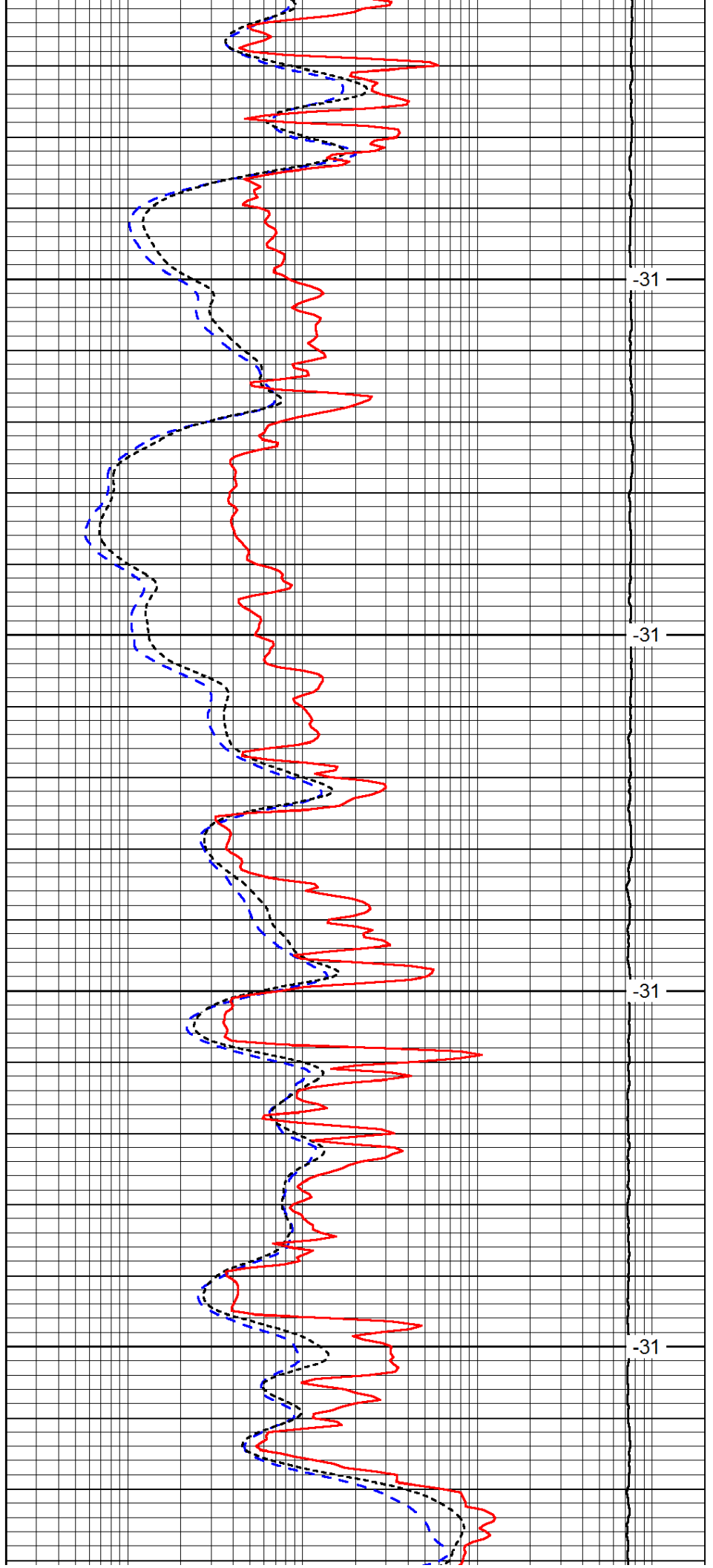


3600

3650

3700

3750

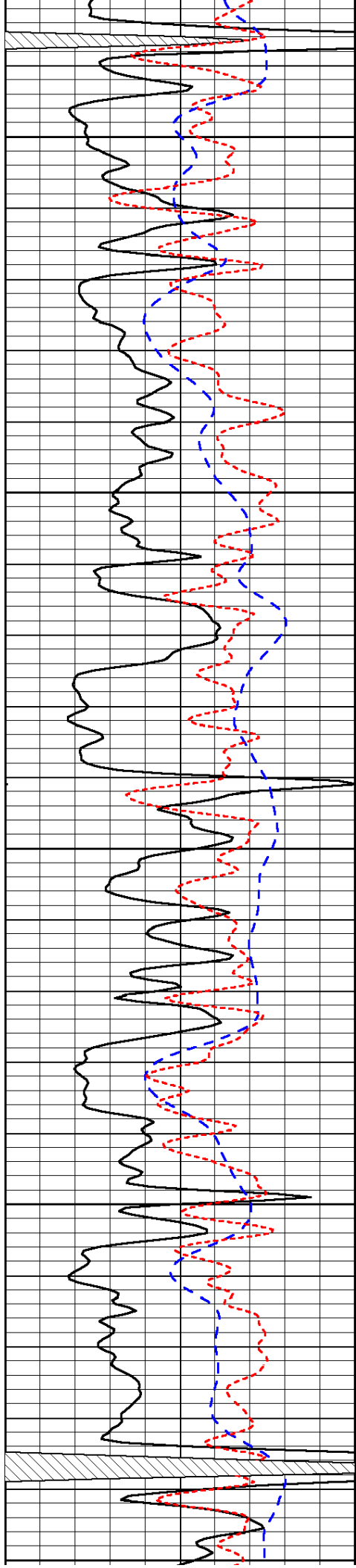


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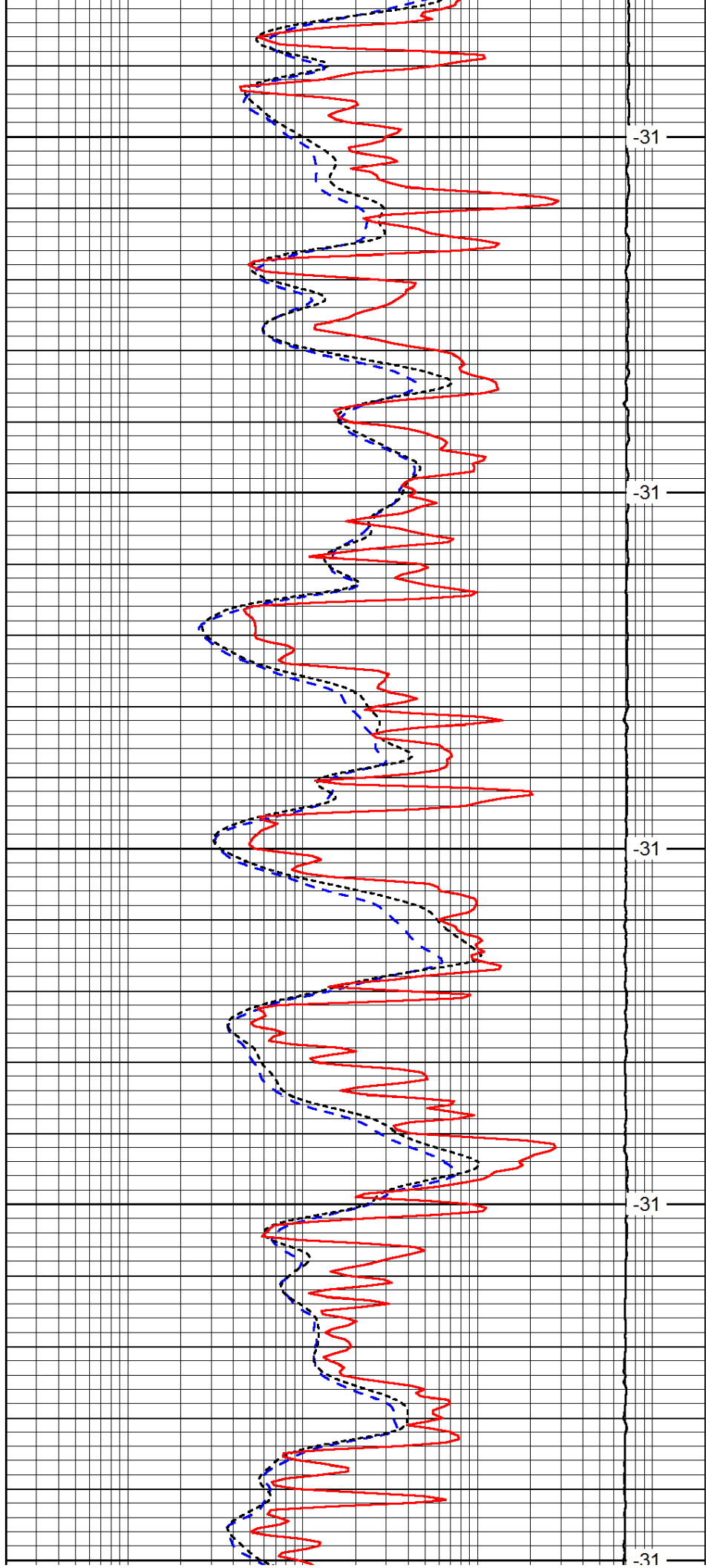
3800

3850

3900

3950

4000



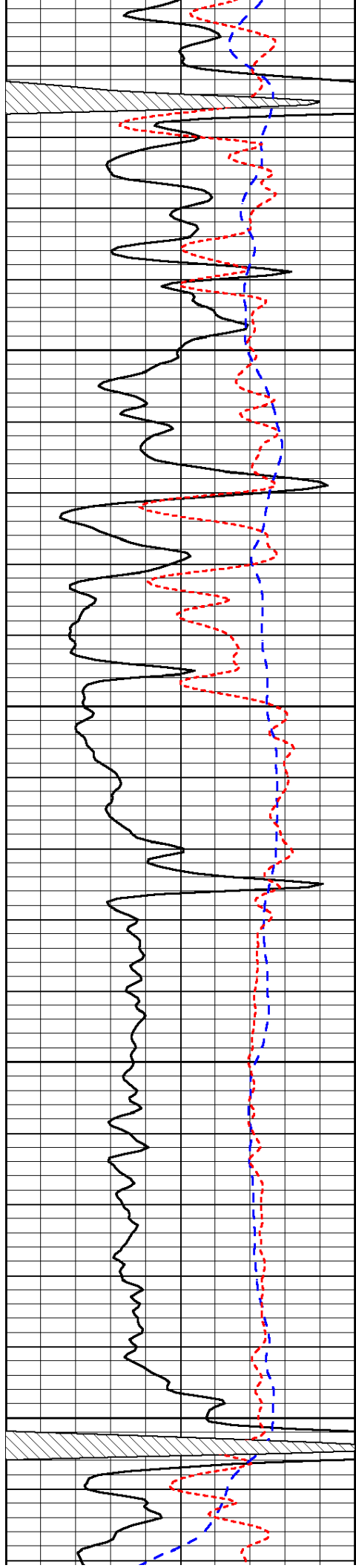
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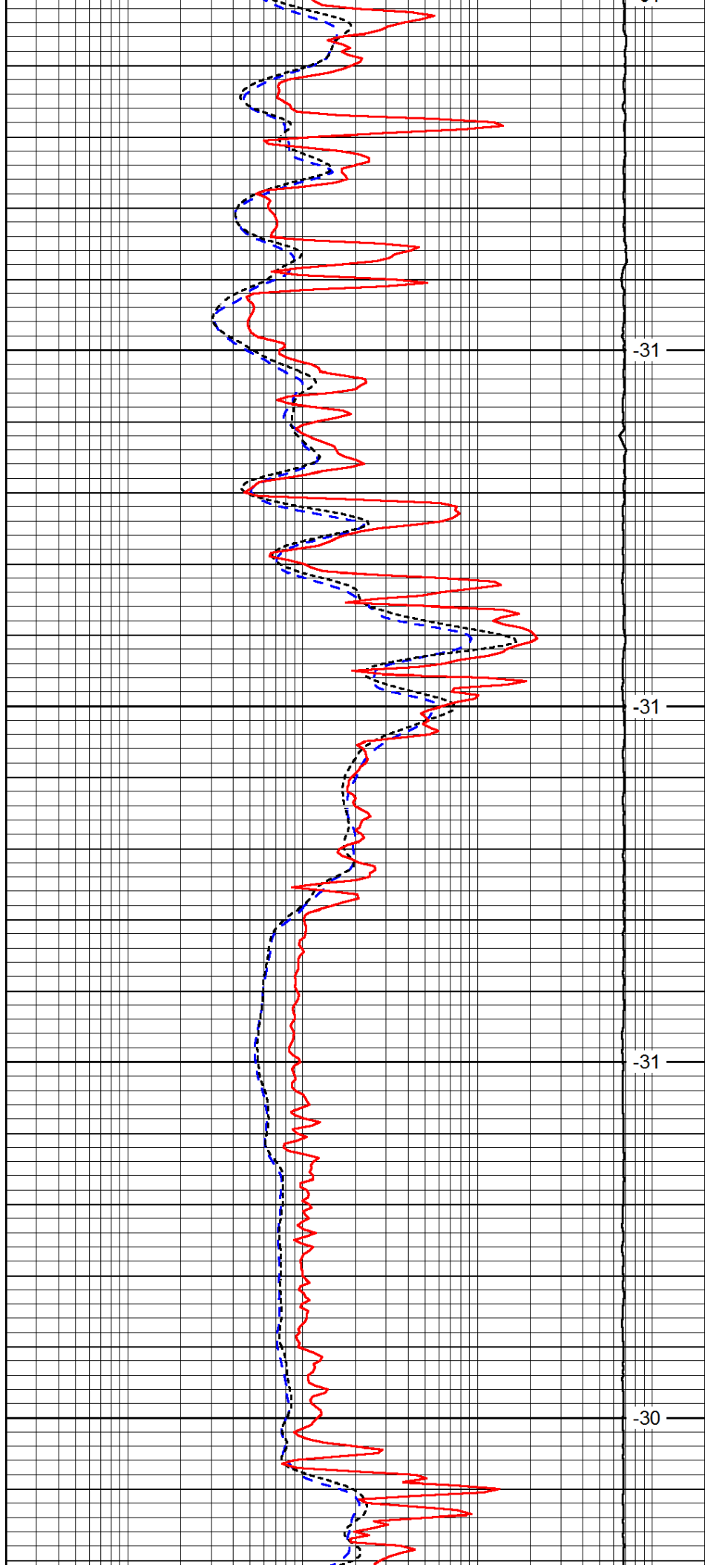


4050

4100

4150

4200

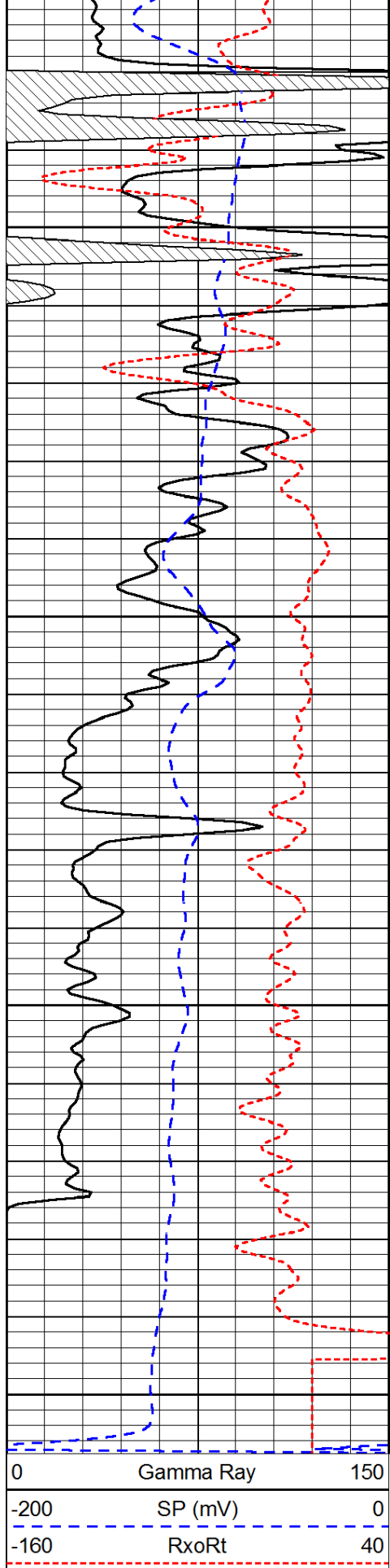


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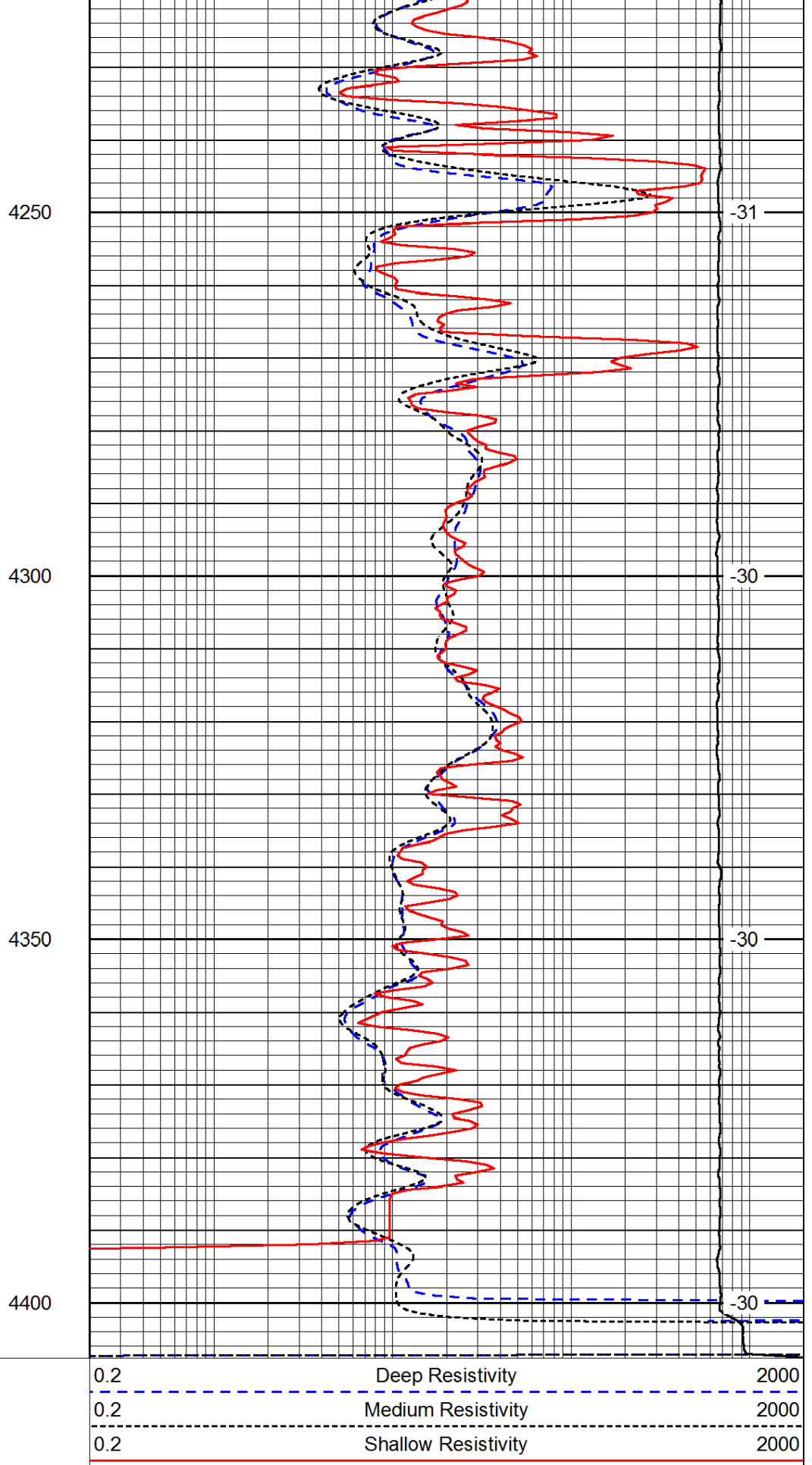
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-31

-30



0	Gamma Ray	150
-200	SP (mV)	0
-160	RxoRt	40



0.2	Deep Resistivity	2000
0.2	Medium Resistivity	2000
0.2	Shallow Resistivity	2000
15000	Line Tension	0

LSPD